

[4910-13-P]

### **DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2013-0216; Directorate Identifier 2012-NM-206-AD]

RIN 2120-AA64

**Airworthiness Directives;** Bombardier, Inc. Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. This proposed AD was prompted by a determination that certain flap actuators require restoration by installing a redesigned flap actuator inboard pinion seal. This proposed AD would require revising the maintenance program by incorporating new airworthiness limitation tasks. We are proposing this AD to prevent flap system failure, and consequent reduced landing performance of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the instructions for submitting comments.
  - Fax: (202) 493-2251.
  - Mail: U.S. Department of Transportation, Docket Operations, M-30, West

Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

• Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email <a href="mailto:thd.crj@aero.bombardier.com">thd.crj@aero.bombardier.com</a>; Internet <a href="http://www.bombardier.com">http://www.bombardier.com</a>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Luke Walker, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7363; fax (516) 794-5531.

### **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2013-0216; Directorate Identifier 2012-NM-206-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <a href="http://www.regulations.gov">http://www.regulations.gov</a>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2012-26, dated October 30, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

The CL-600-2B19 aeroplane flap actuator inboard pinion seal is prone to leak which can cause internal contamination of the actuator braking mechanism and subsequent actuator failure. This condition, if not corrected, can cause flap system failure. In certain weather and runway conditions, frequent flap system failures pose a safety concern.

To improve the internal actuator sealing, the flap actuator manufacturer has redesigned the inboard pinion seal. Transport Canada Civil Aviation (TCCA) has been monitoring, through an actuator sampling program, the performance of the flap system since the introduction of actuators equipped with this new inboard pinion seal. Based on this sampling program and recent flap reliability data, TCCA is mandating a restoration task to install the redesigned flap actuator inboard pinion seal on all applicable actuators.

The required action is revising the maintenance program by incorporating two new airworthiness limitation tasks. The unsafe condition is flap system failure, and consequent reduced control of the airplane. You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

Bombardier Inc. has issued CL-600-2B19 Temporary Revision (TR) 2A-48, dated July 6, 2012, to Appendix A – Certification Requirements, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 Maintenance Requirements Manual. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

### FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with

the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

This AD requires revisions to certain operator maintenance documents to include new actions. Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these actions, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to the procedures specified in paragraph (k) of this AD. The request should include a description of changes to the required actions that will ensure the continued damage tolerance of the affected structure.

## Differences Between This Proposed AD and the MCAI or Service Information

Bombardier CL-600-2B19 TR 2A-48, dated July 6, 2012, to Appendix A – Certification Requirements, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-219 Maintenance Requirements Manual, specifies a task interval of 10,000 flight cycles or 144 months in the "Task Interval" column, and a task interval of 10,000 flight cycles in the "Task Description" column. This proposed AD would require a task interval of 10,000 flight cycles. This difference has been coordinated with TCCA.

# **Costs of Compliance**

Based on the service information, we estimate that this proposed AD would affect

about 573 products of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$48,705, or \$85 per product.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

**Bombardier, Inc.:** Docket No. FAA-2013-0216; Directorate Identifier 2012-NM-206-AD.

## (a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

# (b) Affected ADs

None.

# (c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, equipped with Eaton flap actuators having any part number (P/N) specified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD.

- (1) P/N 601R93101-23/-25 (vendor P/N 852D100-23, -25).
- (2) P/N 601R93103-23/-24 (vendor P/N 853D100-23, -24).
- (3) P/N 601R93104-23/-24 (vendor P/N 854D100-23, -24).

## (d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

### (e) Reason

This AD was prompted by a determination that certain flap actuators require restoration by installing a redesigned flap actuator inboard pinion seal. We are issuing this AD to prevent flap system failure, and consequent reduced control of the airplane.

# (f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

## (g) Maintenance Program Revision

Within 30 days after the effective date of this AD, revise the maintenance program to incorporate Tasks C27-50-111-15 and C27-50-111-17 as specified in Bombardier CL-600-2B19 Temporary Revision (TR) 2A-48, dated July 6, 2012, to Appendix A – Certification Requirements, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 Maintenance Requirements Manual (MRM), except as specified in paragraph (j) of this AD. The initial compliance times for the tasks are specified in paragraph (h) of this AD.

Note 1 to paragraph (g) of this AD: The maintenance program revision required by paragraph (g) of this AD may be done by inserting a copy of Bombardier CL-600-2B19 TR 2A-48, dated July 6, 2012, into Appendix A – Certification Requirements, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 MRM. When this TR has been included in general revisions of the MRM, the general revisions may be inserted in the MRM, provided the relevant information in the general revision is identical to that in Bombardier CL-600-2B19 TR 2A-48, dated July 6, 2012.

# (h) Initial Task Compliance Times

For the inboard and outboard flap actuators identified in Bombardier CL-600-2B19 TR 2A-48, dated July 6, 2012, to Appendix A – Certification Requirements, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 MRM, the initial compliance times for the tasks specified in Bombardier CL-600-2B19 TR 2A-48, dated July 6, 2012, are at the applicable times specified in paragraphs (h)(1) through (h)(4) of this AD.

- (1) For flap actuators that have accumulated less than 6,000 flight cycles as of the effective date of this AD, before the accumulation of 10,000 flight cycles on the flap actuator.
- (2) For flap actuators that have accumulated 6,000 or more flight cycles but less than 10,000 flight cycles as of the effective date of this AD, within 4,000 flight cycles after the effective date of this AD, but no later than 12,000 flight cycles on the flap actuator.
- (3) For flap actuators that have accumulated 10,000 or more flight cycles but less than or equal to 12,000 flight cycles as of the effective date of this AD, within 2,000 flight cycles after the effective date of this AD, but no later than 13,000 flight cycles on the flap actuator.
- (4) For flap actuators that have accumulated more than 12,000 flight cycles as of the effective date of this AD, within 1,000 flight cycles after the effective date of this AD.

## (i) Repetitive Compliance Time

Where Bombardier CL-600-2B19 TR 2A-48, dated July 6, 2012, to Appendix A – Certification Requirements, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 MRM, specifies a task interval of 10,000 flight cycles or 144 months, the task interval is 10,000 flight cycles.

# (j) No Alternative Actions and Intervals

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or

intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k) of this AD.

# (k) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7300; fax (516) 794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

### (I) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian

Airworthiness Directive CF-2012-26, dated October 30, 2012; and Bombardier CL-600-2B19 TR 2A-48, dated July 6, 2012, to Appendix A – Certification Requirements, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19

(2) For Bombardier, Inc. service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email <a href="mailto:thd.crj@aero.bombardier.com">thd.crj@aero.bombardier.com</a>; Internet <a href="http://www.bombardier.com">http://www.bombardier.com</a>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton,

WA. For information on the availability of this material at the FAA, call 425-227-1221.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

Issued in Renton, Washington, on March 28, 2013.

MRM; for related information.

[FR Doc. 2013-08048 Filed 04/05/2013 at 8:45 am; Publication Date: 04/08/2013]

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